THESIS / REPORTS
MADISON CHILDREN'S

FOREST PRODUCTS BACKPACK

Final Report

November 21, 2002

Prepared for the United States Department of Agriculture,
Forest Products Service, Forest Products Laboratory

by

Madison Children's Museum, Madison, Wisconsin

Contents

3 Introduction

4 Development

5 Backpack Contents

11 Distribution

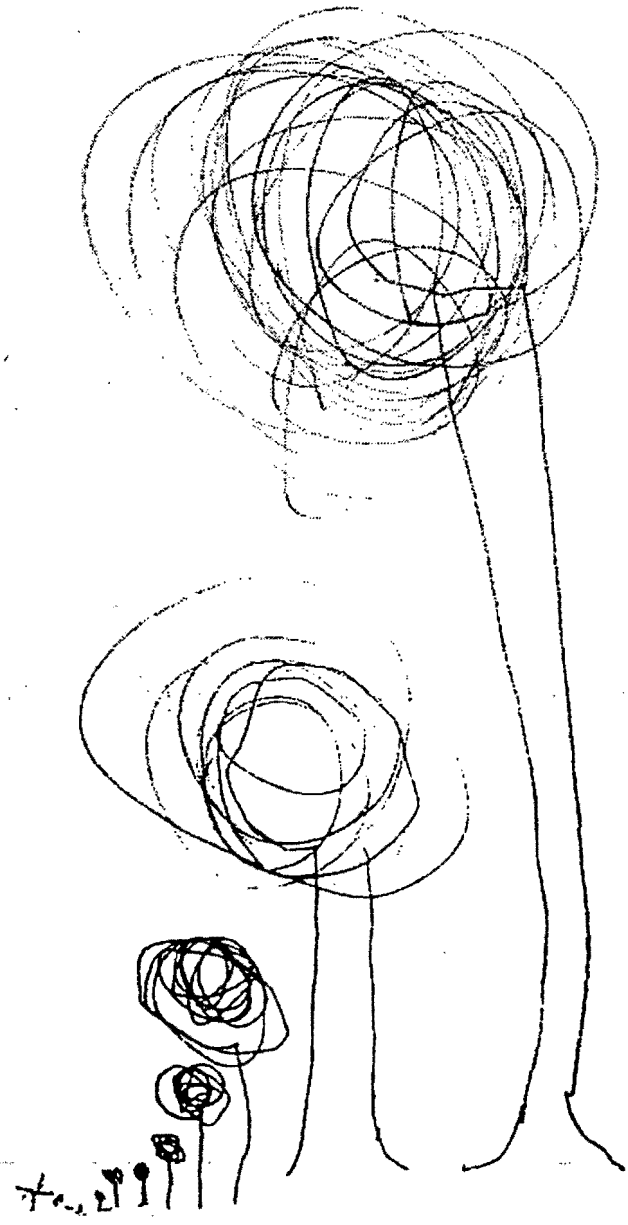
12 Evaluation

16 Recommendations

17 Madison Children's Museum

18 Credits

19 Backpack Materials Suppliers



Introduction

The development of the Forest Products Laboratory Backpack has been a challenging and rewarding experience. Both Forest Products Laboratory and the Madison Children's Museum are dedicated to expanding outreach opportunities. With the gradual erosion of forests and urban green space, developing children's knowledge and appreciation for one of our most precious natural resources is critically important. We are confident that the Backpack provides children and families an exciting opportunity to learn about trees and forests and supports science curriculum standards for young, primary age children.

GOALS The primary goals of the FPL Backpack project are:

Strengthen USDA, Forest Service, Forest Products Laboratory connections to the general public, schools and young audiences.

Develop a collaboratively designed product that will be used by children, teachers and families.

Use developmentally appropriate concepts, materials and activities to ensure learning, fun and engagement for young users.

Facilitate Forest Products Lab reaching a larger and younger audience than is currently possible.

Engage early school age children in fun, inquiry based learning about Forest Products Lab products and services.

Link Backpack with Wisconsin Department of Instruction education standards, teacher recommendations and target audience.

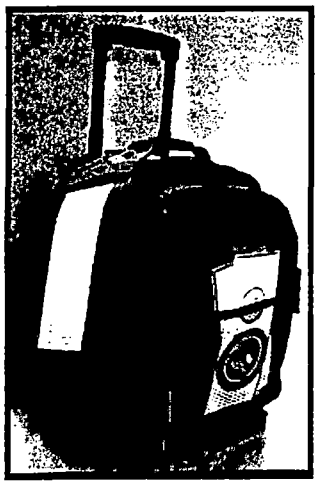
OVERVIEW This report will describe the development process of the Backpack, and outline the contents indicating how the chosen activities support the language, cognitive and conceptual development appropriate to young children. The third section of the report will describe the two-fold process of evaluation of the backpack and discuss the findings. Finally, recommendations for revision and ideas for distribution opportunities will be made. Appendices will list sources and current costs for Backpack materials.

Development

DPI REVIEW The development of the Forest Products Lab Backpack began with a review of the Wisconsin Department of Public Instruction's instructional standards in science education, particularly those which overlap with the Madison Children's Museum's target audience (ages 0 to 8). The standards provided a valuable guide in selecting developmentally appropriate knowledge, skills and materials which would support curricula already used in Wisconsin public schools.

NEED ASSESMENT A review of existing commercial educational curricula evidenced several "trunk" packages, some of which have been adopted in many Wisconsin public schools. In particular, the Madison Public Schools recently adopted one such K-5 curriculum, and had begun system wide staff development during the 2000-2001 school year. Interviews with K-3 teachers and the Science co-coordinator in the Madison School System suggested that teachers were focused on implementing the selected curriculum and that they generally felt that their instructional needs were being met by it. It became clear that science materials and activities which parents/caregivers and children could do together to reinforce classroom learning at home would provide a valuable adjunct to ongoing science education in the schools.

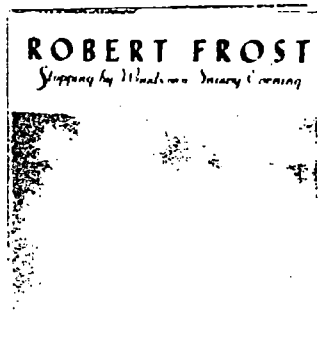
ACTIVITY DEVELOPMENT Museum staff began exploring what a collection of home activities might look like and, with the approval of current Forest Product Lab staff, changed the focus of the project to the development of a backpack which would contain activities that would engage early school age children in fun, inquiry based learning, rooted in the Forest Products Lab mission statement. Contact was made with other Museums in the Midwest that have outreach programs involving activity packs or backpack. The staff at the Minnesota Children's Museum in St. Paul was particularly helpful in sharing their development process and distribution experience. Forest Products Lab staff reviewed all stages of the contents of the backpack for accuracy and provided many suggestions, many of which were incorporated into the final stages of the backpack. The completed backpack reflects their considerable contributions.



Backpack Contents

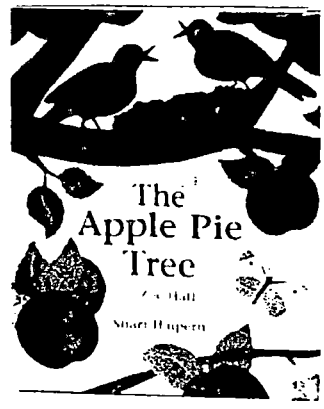
BOOKS

The Tree In the Wood by Christopher Manson also presents an add-on song. A version of the song is included in the compact disc.

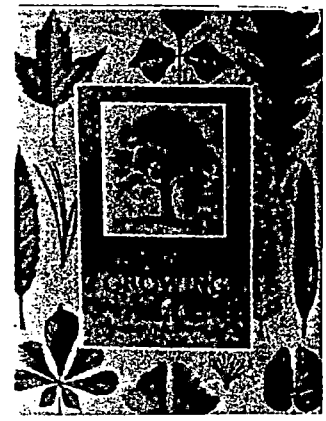


Stopping by the Woods on a Snowy Evening by Robert Frost evokes the sounds of a forest in the depth of winter withe delicate illustrations.

Leaves, Leaves, Leaves by Ken Robbins provides clues for identifying trees and detailed photos of autumn leaves.



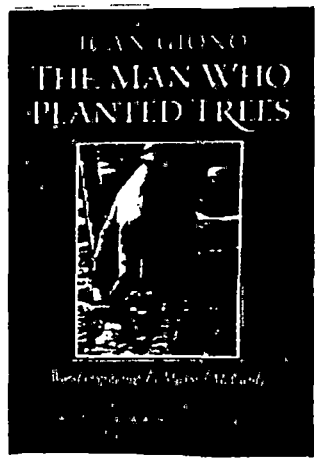
Apple Pie Tree by Zoe Hall is a great source of ideas for building pictures with natural and crafted materials. It's collage technique of illustration enriches a story about the life cycle of a tree.



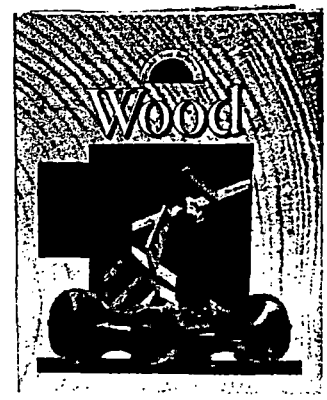
A Tree is Growing by Arthur Dorros beautifully illustrates the life cycle of a tree and shows the function of the different parts of a tree. This book is now out of print.

Tell Me, Tree by Gail Gibbons is a substitute for A *Tree is Growing,* which is no longer in print.

BOOKS



The Man Who planted Trees by Jean Giono. This book, intended for parents, is the story of a tree planter that single-handedly reforests a barren section of southern France.

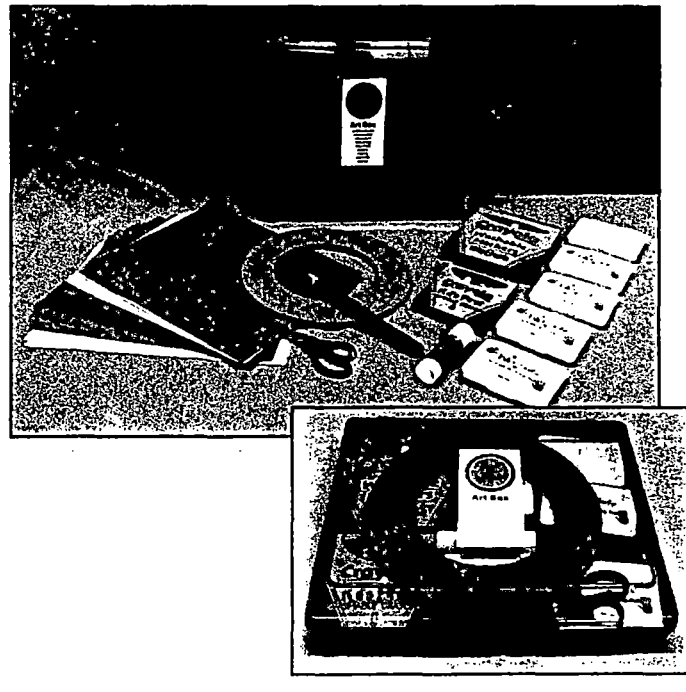


Wood, by Catherine Chambers, is a multicultural look at uses for wood and wood products. This book is now out of print.

Trees, Leaves and Bark by Diane L. Burns provides illustrations of trees, bark and seeds from many different kinds of trees.

Be a Friend to Trees by Patricia Lauber explores the function of different parts of the tree and how trees benefit us.

ARTBOX



The Art Box contains the following materials:

- cardboard circle
- water soluble markers
- washable large crayons
- twig pencil
- white and colored paper (3 each of 7 colors and white)
- stamp pads (5 colors)
- glue stick
- scissors

TOOL POUCH

The Tool Pouch contains the following materials:

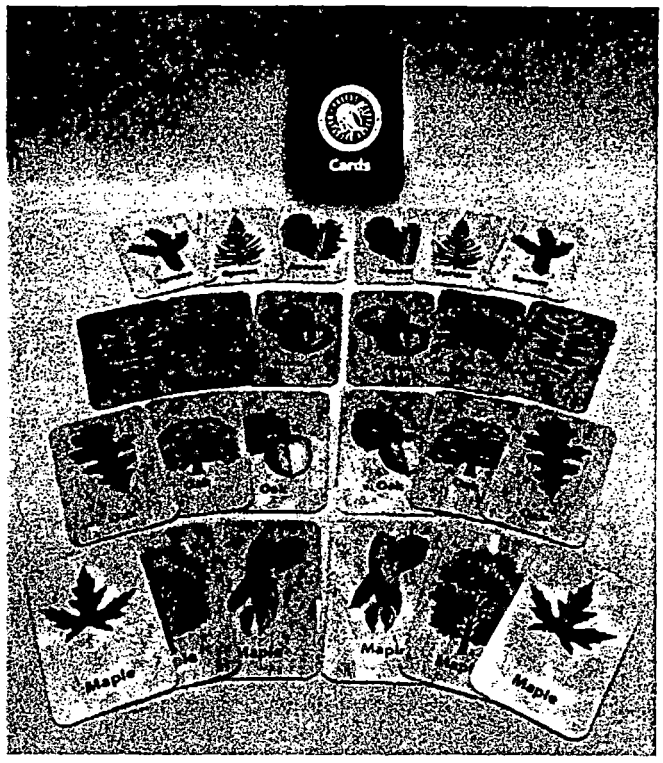
- magnifying glass
- bird call with a wrist band
- tape measure
- Field Guide
- paper bag

The Pouch is for gathering and examining natural materials. The Tree Walk activity is reproduced on the Field Guide.

STENCILS AND LEAF PRESS

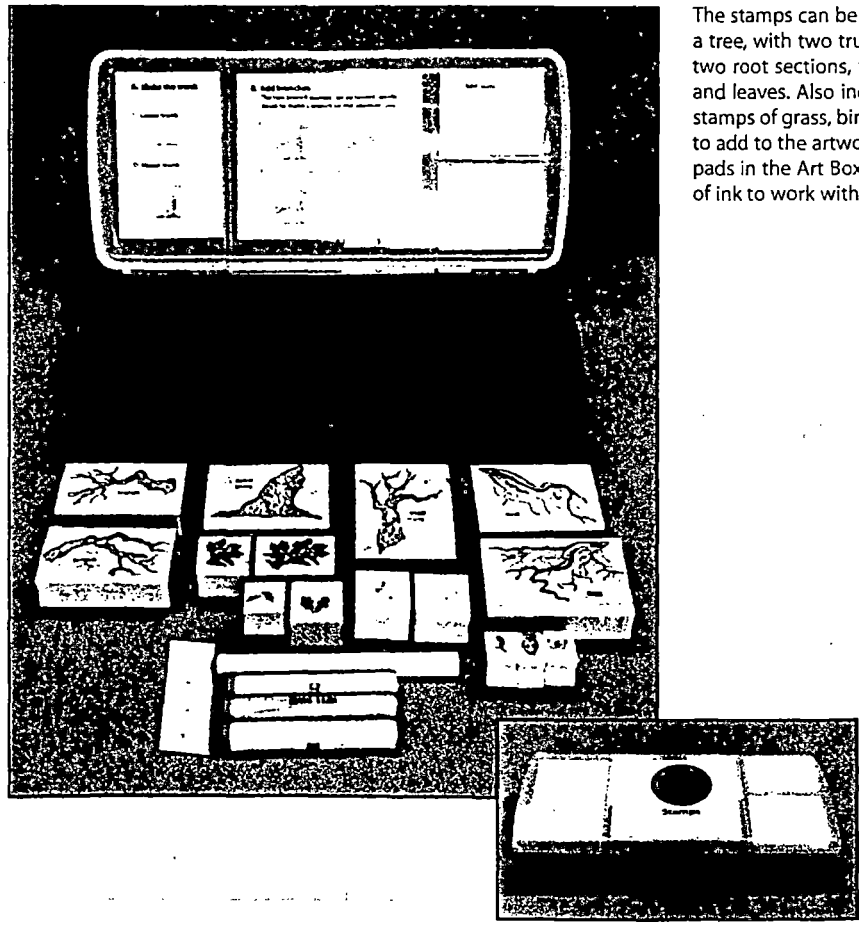
The stencils are of four leaves, basswood, maple, oak and willow. The leaf press uses any kind of paper to absorb moisture and is held together by two rubber bands.

TREE CARDS



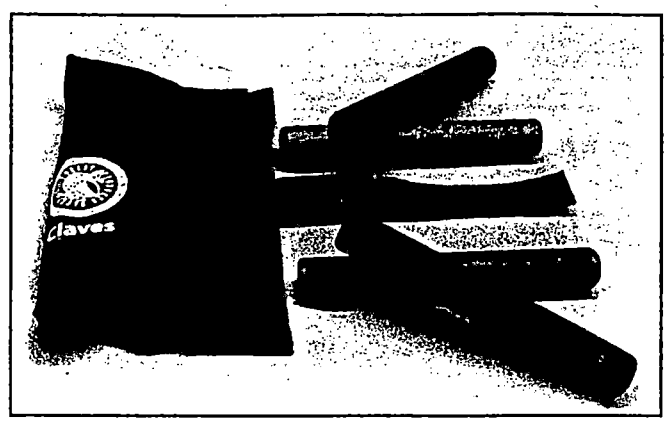
The Tree Cards show the seed, silhouette and leaf of four trees. and are printed on real maple. Each pack has two of each image and can be used for memory games or a "Go Fish" type of game.

TREE STAMPS



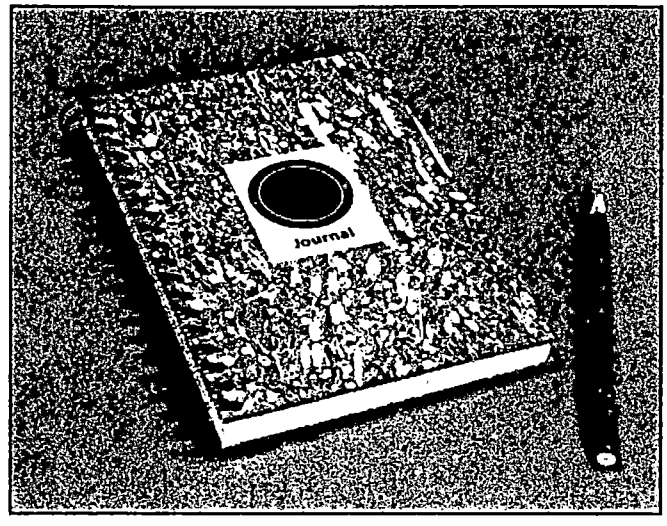
The stamps can be used to build a tree, with two trunk sections, two root sections, two branches and leaves. Also included are stamps of grass, birds and insects to add to the artwork. The stamp pads in the Art Box offer 5 colors of ink to work with.

CLAVES



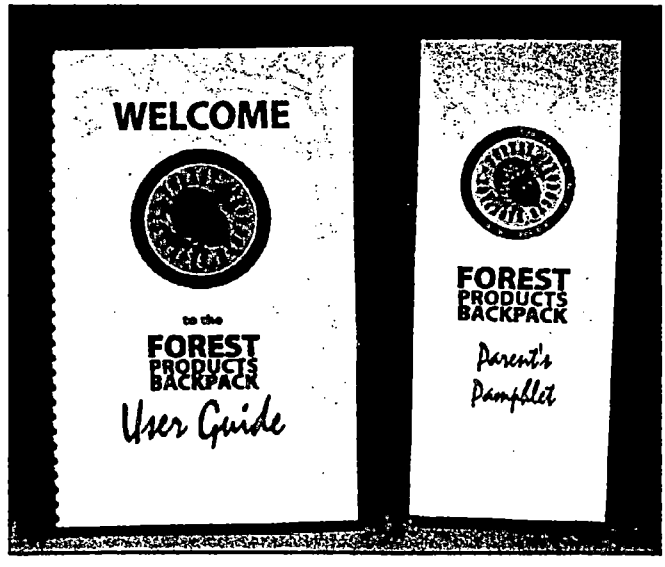
The claves are meant to demonstrate the different pitch and appearance of two types of wood. They can be used to play along with the CD songs or to accompany a song sung by the child or parent.

JOURNAL



The Journal can be used for recording observations, writing, drawing, stamp art or rubbings. The cork cover and twig pencil (from the Art Box) present another opportunity to see and feel natural materials.

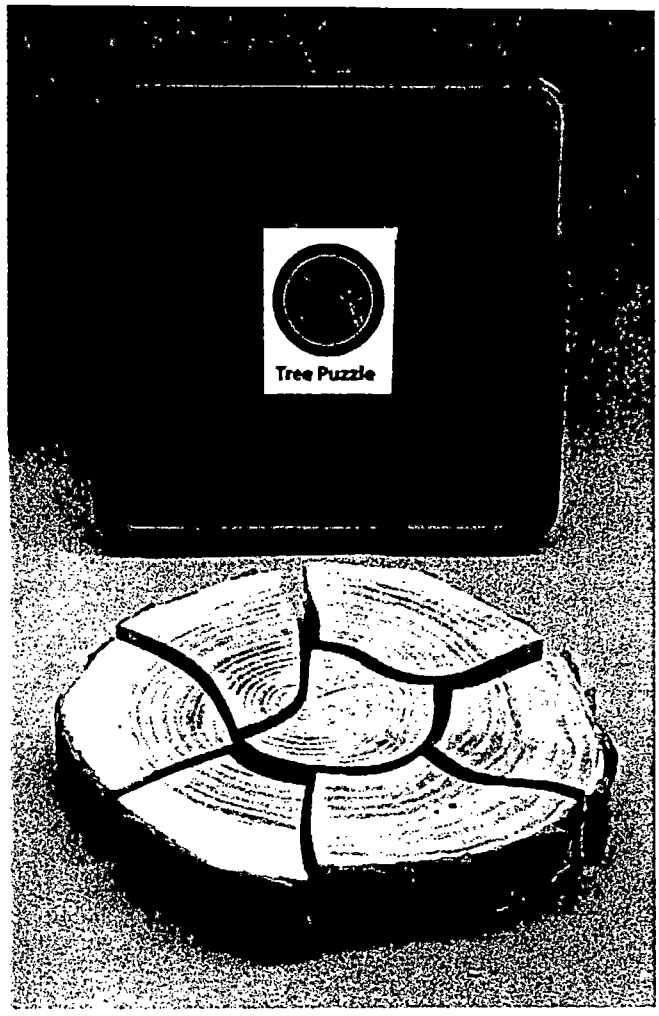
USER GUIDE/ PARENT'SPAMPHLET



The User Guide lists the items in the Backpack along with suggestions for their use and related activities.

The Parent's Pamphlet provides an overview of the Backpack and introduces ideas for conservation and efficient use of resources.

TREE PUZZLE



The Tree Puzzle is a large tree cookie that has been cut into puzzle pieces. It provides an opportunity to see tree rings and experience the look and feel of raw wood.

VIDEO, COMPACT DISC

The *Songs of the Forest* CD is a collection of four children's songs about trees. Three are original, written for this project by David Landau, and one is a recording of the Greengrass song included with the book, *A Tree in the Wood.*

The *Once There Was a Tree* video highlights the work of a woman biologist who studies the canopies of forests. It introduces the concepts of cause and effect and highlights the role of scientists in conservation.

Distribution

The Backpack was distributed to families from the front desk at the Madison Children's Museum for the two month pilot. The availability of the Backpack was announced in the MCM newsletter that is mailed to all museum members, and a flyer was available at the desk. Copies of both the newsletter announcement and flyer are included in the Appendix.

PROCEDURES

Parent names and phone numbers were recorded at checkout. The backpack was lent for a period of two weeks, and families were given a tube of token items provided by FPL when they returned the backpack.

A checkout form was developed for use by the Museum's front desk staff. A list of specific features to highlight for parents at checkout time would have helped make some parents aware of the user guide before getting into the Backpack activities and the zip-off front pack. It was helpful to have a list of contents, or an activity guide, available to staff to answer questions. If space allowed, a display case for the contents would have been very helpful.

MAINTENANCE

After a backpack was returned, it was reviewed by a museum staff member very familiar with the contents, and consumable items were replaced. Only one permanent component was lost and replaced during the pilot. Wear seemed minimal over the two month period of time. No components needed replacement for reasons of heavy use or breakage.

MARKETING

It appears that most families found out about the backpack from other families or from staff at the front desk. The newsletter article didn't seem particularly effective, possibly because of the timing of it. The flyer available at the front desk served as an announcement, but didn't have information about the backpack itself. It was suggested that listing the contents on the display flyer would have been more helpful. Parents were not going to check it out until they they had some idea of what was in it.

Evaluation

Evaluation of the Forest Products Lab Backpack was done in two stages. When the first Backpacks were completed and printed materials were in draft stage, six families volunteered to use the Backpack with their children, to participate in an in-depth interview, and to respond to the evaluation form included in all backpacks. Changes were then made to backpack materials, and parents' suggestions for further development were noted.

PROCEDURE

Once changes were made backpacks began circulating from the main desk at MCM. A notice of availability was announced in the monthly newsletter sent to all museum members and further information was provided in a flyer available at the front desk. Circulation from the Museum began on June 15, and closed on August 20. Families were asked to return the backpack with a completed evaluation form after two weeks. A sample evaluation form can be found an Appendix. Over the three month period of time nineteen families used and commented on the backpack.

Finally, three teachers of young children (1 preschool, 2 primary grades) were asked to review and respond to the backpack materials.

AGE GROUPS

A total of twenty-eight children from ages 2 through 9 were exposed to the Backpack with their parents, older siblings and other caretakers as helpers. Twenty-one children were between the ages of 2 and 5. All ages, with the exception of 7 year olds, were represented in the count more than one time. All parents who responded to the evaluation form reported the materials to be engaging, and there were enough activities available for a wide developmental range of children in home settings. The books seemed appropriately chosen with only four parents reporting that they were too difficult for their young children. One parent commented that when reading to young children one chooses what part of the text to share, and in so doing, avoided material that was too complex for a very young child. Perhaps more guidance should be given as to how to use the books with very young children.

The evaluation form was filled out by 15 adults, and provided both frequency counts and comments by both children and parents. In addition, seven families used the journal activity to draw and record comments.

PARENT'S REACTION OVERVIEW

The Backpack was designed to offer a wide range of activities to meet the needs of families with children of various ages. Parents responded positively to the contents, indicating that there was something for everyone in the family. Frequency counts reveal that, although there were some activities that were more "popular", all activities were tried by at least three children. Overwhelming favorites were *Songs of the Forest* compact disc with accompanying tree song and claves, the tree stamps, Reading Rainbow video, and the bird call in the Tree Walk activity. The collection of art materials was used by all participants. The tree puzzle was mentioned often in parent/child comments, but numerical data is not available in that the puzzle was inadvertently omitted from the first versions of the evaluation form.

CHILDREN'S REACTIONS COMMENTS

The richest source of evaluation results were the comments recorded by parents in the evaluation form. Although difficult to summarize (all comments are included in an Appendix) parent responses were overwhelmingly positive. They reported their children's reactions:

- *He loved pulling it out and having so many options.*
- *Very interested and excited the entire two weeks.*
- *Henry did not want to give it back. He cried & cried & asked if we could get it again sometime.*
- *.....The thing he used multiple times was the stamps. I was surprised because my son likes art projects least in preschool. Maybe he liked them because you could have a lot of freedom in how your tree turned out....different each time.*

BACKPACK COMMENTS

Typical comments made by the parents regarding the Backpack:

- *Very complete and diverse activity and books. Very enjoyable.*
- *It is great to have access to planned activities without having to gather all the materials included in the backpack.*
- *I think I was more excited than my child (at first)...everything in it was so well chosen and creative and nicely done.*
- *Wonderful activities for our children to respect and appreciate nature.*
- *We loved it! It was very well organized, well designed, thoughtfully presented, full of lots of educationally rich materials, a great combo of original ideas, concepts, helpful tools, books, etc.*
- *.....It seems like there's something, real lots of things, for all ages.*

JOURNAL COMMENTS

Eleven families used the journal. Comments recorded in the journals were among the most specific. For example:

- *The Tree Walk inspired our family to go to the Arboretum for an early morning walk. We looked under the microscope (magnifying glass) at seed pods, leaves, shelf mushrooms and other neat stuff. The bird call really seemed to encourage the wild birds to sing. Most exciting of all was when we spotted a coyote in a field of cat tails.*

-We measured the silver maple in our back yard and it's 175" around! We saw six spiders on a walk around our neighborhood. B__ says he really liked the

magnifying glass in the backpack.

- *Thanks for sharing this backpack full of activities. We've really enjoyed it! The books were fun and informative. M__ loved the stencils. We used charcoal with them to make a postcard to send to friends. She used the paper tree ring to fashion a design for a sign which she decorated with the stamps. On our walk we measured trees and collected sticks which we used later to create a sculpture. The materials are beautiful and the activities fun.*

PARENT SUGGESTIONS

Suggestions for improvement of the backpack centered around several themes.

- Many parents mentioned the weight or size of the backpack and to use it as an actual backpack was unwieldy. *(The Backpack has a smaller removeable pack attached to the front that is intended to be used to carry selected Backpack items. It is important to tell patrents about this feature at checkout.)*
- Some parents suggested breaking the backpack into smaller components which could be carried more conveniently. *(See above)*
- Some families remarked that there were many activities they would have liked to have done, but couldn't find the time in a two week interval, implying that there were too many activities included in the backpack. On the other hand, parents also mentioned appreciation for the wide range of activities designed for a broad age range of children. Other parents expressed the desire to borrow the backpack again.
- Given the number of activities in the backpack, some parents reported difficulty of managing and keeping track of all the components. A teacher suggested numbering the individual pieces (i.e., stamps, puzzle pieces) and listing the number of pieces on each container.
- One parent reported returning one of the backpack books to the library, and suggested that each book be clearly marked and identified as belonging to the backpack.
- It was suggested that recycled paper be used for all printed materials.[1]
- One parent found the stamp activity too challenging for a four year old child, and suggested providing a picture of a tree into which animals could be placed.

Finally, three teachers of young children (preschool, Kindergarten, grades one and two) were interviewed. All teachers thought that the materials and activities were appropriate for young children and commented positively about the wide range of developmental levels at which the backpack materials could be used. They appreciated the high quality of the materials. All teachers thought the backpack would be an extremely useful resource in their classrooms even though many activities would need to be adapted for group use. Their comments and suggestions are summarized as follows.

[1] *Only paper with a recycled content was used.*

TEACHER COMMENTS, (con't)

All teachers commented that the materials lent themselves to very rich language development experiences. For an example, the stamping activity can develop scientific vocabulary related to the anatomy of a tree and naming of animals and their habitats. It also lends itself to sequencing activities, which can be used to develop a story about the tree that they constructed. Sequence cards could be developed for younger children in order to help acquire labels for parts of a tree, culminated by building the tree with stamps.

Reading Rainbow is familiar and popular with young children and the video would be immediately appealing to them. It could be used in a classroom in several ways, and features a woman scientist doing exciting research.

When families returned the backpack to the Museum, they were given a collection of FPL tokens which included a patch embroidered with the FPL backpack logo. One teacher remarked on the practice of distributing patches in state and national parks and thought that it could be incorporated wherever the backpack is used.

Two teachers expressed concerns about the use of "natural" materials in a public or school (rather than family) environment.[1] The cards seemed fragile[2], and one teacher was concerned about the stencils becoming stained from markers.[3] Also mentioned was the need for the stamps to be cleaned after each use.[4] However, they appreciated the materials made of wood, commenting that children need exposure to "real" wood.

[1] *The Backpack is not intended for group or school use.*

[2] *The cards are as sturdy and flexible as regular playing cards.*

[3] *Stencils are easily sanded for cleaning or can be coated with a clear finish to resist stains. All markers and crayons are washable.*

[4] *Stamps do not need to be cleaned after use and most users did not do this.*

Recommendations

USER/CONTENT DIVERSITY

The respondents to the MCM pilot evaluation were not as ethnically and economically diverse as we would have liked. Although the materials in the backpack were chosen for appeal to a wide variety of children, age was probably the variable most successfully explored. We would recommend that in another "edition" of the backpack more multicultural activities and materials be developed.

DISTRIBUTION PROCESS

Throughout the distribution process we learned how important the check in and out system was to the success of the project. It is essential that it be someone's responsibility to check in backpacks as they are returned. When the same person is responsible for the check in and refurbishment over time, familiarity with the materials makes the process more efficient and accurate.

- An organizational system of storing replacement parts is also important.
- Having a form to fill in at checkout helps insure that all the contactact information is collected and in the same format.
- It is strongly recommended that the users are told at checkout time that there is a user guide to give them an overview of the Backpack contents and suggested activities and that the front pack zips off for use "in the field".

WOOD PROTECTION

Coating the tree puzzle and the stencils with a clear polyurethane is recommended to make clean-up easier. If a water-based coating is used, both sides must be coated in order to avoid a curl in the wood.

LABELING

Labeling the activity containers with the number of pieces as well as the name would help users keep track of activity components.

Clearly label the books with an Backpack label and/or stamp(provided) the Backpack logo inside the book to avoid mistaking them for library books.

INTENDED USE/REDESIGN

The Backpack was designed only for family use in its entirety. It is not recommended that it be made into smaller activities in its present form. The activites combine well because they complement each other. They are deliberately open-ended to allow for new combinations and unanticipated creative play. If the Backpack were to be used in group settings or made into smaller packs with fewer activities, an overall redesign would be necessary.

Madison Children's Museum

Madison Children's Museum, established in 1980, is an innovative learning center that makes connections between children's discovery learning and a strong, vibrant community. MCM fosters children's sense of wonder, imagination, critical thinking, creativity and confidence.

MUSEUM VALUES

Museum experiences are grounded in strong child-focused values. The Forest Products Backpack development was guided by our values:

- *Commitment to providing authentic and relevant experiences* seen in the use and representation of real materials whenever possible such as use of wood for stencils, claves and playing cards as well as accurate representation of trees and tree parts.
- *Commitment to use of sustainable materials* seen in the use of wood, 100% cotton in the apron, water-based inks and recycled paper.
- *Commitment to joyful discovery* seen in open-ended and re-interpretive activities and in a focus on creating opportunities for wonder and delight and children's desire to know more.
- *Commitment to respect for children's ways of learning* seen in a strong developmentally appropriate appeal, sharing FPL's research with early learners, thus beginning with "trees".

PARTNERSHIP

Madison Children's Museum and our audiences have benefited greatly from an extremely successful partnership with USDA Forest Service, Forest Products Laboratory over the past five years.

Through the partnership Madison Children's Museum has been able to adopt Forest Products research and transform it into compelling educational activities for children that stress the importance of forest management, scientific inquiry and forest products technologies.

PARTNERSHIP HISTORY

Partnership Background:

- 1997–1999: Support for Construction Zone Exhibit and summer construction and recycled materials related programming, Forest Products Teaching Lab Cart for educational programming within MCM, Renovation of Program Room.
- September 2000–August 2002: Development of School based educational trunks, which evolved into the backpack project.

Credits

FOREST PRODUCTS LABORATORY

Gordie Blum, *Public Affairs Director*

Sue Paulson, *Public Affairs Specialist*

Alex Wiedinhoelt, *Botanist*

Ariana Mikulski, *Information Assistant*

Sandy Morgan, *Information Assistant*

MADISON CHILDREN'S MUSEUM

Jeanne Strickland, *Director of Education and Visitor Services*

Joan Panepinto, *Project Co-coordinator*

Sue Manske, *Graphic Designer, Co-coordinator*

Evan Murdock, *Exhibit Fabricator*

Christine Knorr, *Graphics Design Associate*

Backpack Materials Suppliers

ART BOX

BOOKS/JOURNAL/MUSIC/VIDEO

BOOK ACCESSORIES

CARDS

CLAVES

LEAF PRESS/STENCILS

PUZZLE

STAMPS

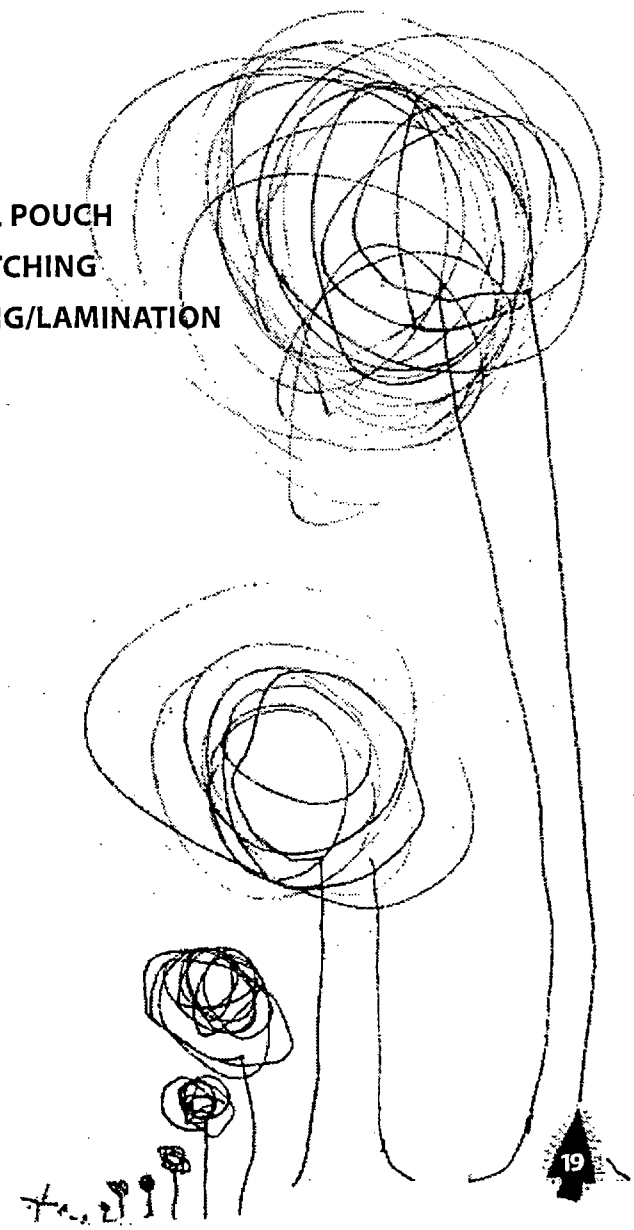
TREE WALK ACTIVITY/TOOL POUCH

ENGRAVING/PATCHES/STITCHING

SCREEN PTINTING/PRINTING/LAMINATION

SUPPLIERS

PROJECT DESIGNERS



ART BOX

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
PLASTIC ART BOX	"Iris In The Office" Project Case 12-1/2 x 10-7/16 x 1-13/16" SI-320	Iris USA, INC.	Office Depot		6.99
ART BOX LABEL	**(see printed materials)**				
CARDBOARD CIRCLES	cardboard "wreath"	Gravity Works	Gravity Works	Douglas VanHorn	.20 ea. + set up (cut at same time as leaf press/stencils)
MARKERS	12-color Washable Original Formula Marker Set #7812	Crayola	NASCO Arts & Crafts 2002 Catalog	Bian Shea	6.35 / set
CRAYONS	Jumbo Classic Color Washable Crayons #71662 03280	Crayola	Wal-mart		1.96/ set
TWIG PENCIL	Twig Pencil	Universal	Madison Children's Museum	Bridget Kelley-Wolle Gift Shop Mananger	1.00
GLUE STICK	Elmer's Washable School Glue Stick .77-oz. stick 9716152	Elmer's	NASCO		.95 ea
CONSTRUCTION PAPER	9 x 12 Tru-Ray Sulphite Construction Paper 3 ea. of 8 colors + white Yellow-Orange 9708565(AC) Gold 9708565(AB) Red-Orange 9708565(H) Warm Brown 9708565(V) Dark Brown 9708565(BB) Black 9708565(J) Holiday Green 9708565(AM) White 9708565(A)	Tru-Ray	NASCO		12.40 (8 x 1.55/pkg.)
SCISSORS	Fiskars ForKids Softgrip Scissors blunt tip SB27716	Fiskars	NASCO		3.50
STAMP PADS	Childsafe nontoxic washable stamp pad Streamline case w/ raised felt pad. 5 colors. Color / Order # CSW, Black SP-RCSWBK CSW, Brown SP-RCSWBR CSW, Green SP-RCSWGR CSW, ORANGE SP-RCSWOR CSW, YELLOW SP-RCSWYE	Bedell-Kraus	Bedell-Kraus	Maurine	17.50 (5 x 3.50/ea.)

BACKPACK

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
BACKPACK	"Essentials Rolling Backpack" Forest Green # 1118	Ricardo Beverly Hills	YOUNKER'S Department Store East Towne Mall Madison, WI 53703 ph: 241-2111	Jim (manager)	36.93 ea.
EMBROIDERED PATCH	**(see printed materials)**				
EMBROIDERED NUMERAL	**(see printed materials)**				

BOOKS / JOURNAL / MUSIC / VIDEO

TITLE	AUTHOR / ILLUSTRATOR	PUBLISHER	ISPN#	RESOURCES
BOOKS				
TELL ME TREE: ALL ABOUT TREES FOR KIDS (replacement for "A Tree Is Growing")	Gibbons, Gail	Little Brown & Co (Juv Trd) March 2002	0316309036	List Price Amazon B&N
STOPPING BY WOODS ON A SNOWY EVENING	Frost, Robert / Jeffers, Susan (illst.)	E P Dutton October 1978	0525401156	List Price Amazon B&N
TREES, LEAVES AND BARK (Take-Along Guide)	Burns, Diane L. / Garrow, Linda (illst.)	North Word Press April 1998	1559716282	List Price Amazon B&N
APPLE PIE TREE	Hall, Zoe / Halpern, Shari (illst)	Scholastic Trade September 1996	0590623826	List Price Amazon B&N
BE A FRIEND TO TREES (Let's-Read-and-Find-Out, Stage 2)	Lauber, Patricia / Keller, Holly (illst.)	Harpercollins Juvenile Books (Revised addition) January 1994	0064451208	List Price Amazon B&N
THE TREE IN THE WOOD: An Old Nursery Song	Manson, Christopher (illst.)	North South Books April 1993	1558581928	List Price Amazon B&N
THE MAN WHO PLANTED TREES	Giono, Jean, et al	Chelsea Green Pub. Co October 1999	1890132322	List Price Amazon B&N
WOOD (Would You Believe It)	Chambers, Catherine	Raintree / Steck Vaughn June 1996	0817241027	List Price Amazon B&N
AUTUMN LEAVES	Robbins, Ken	Scholastic Trade September 1998	0590298798	List Price Amazon B&N
JOURNAL (cork cover)	Cork Dapple Dark Wire 7 x 10w White	Michael Roger Press, Inc	1573785946	Micheal Roger Press
MUSIC CD: Songs of the Forest	Landau, David	CBSB Music, 2002		
VIDEO: Once There Was A Tree	Reading Rainbow TV Series: Romanova Natalia / Spirin, Gennady (illst.)	GPN-Educational Media	126.104 PGM #104	GPN Educational Media

BOOK ACCESSORIES

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
BOOK TAPE	Demco Film-fiber Tape 1/2" 5.5-mil thickness, 40 lb. tensil strength # P162-0232	Demco	Demco 2002 Annual Catalog	Brian Shea	7.59
BOOK COVER JACKETS (lg) (hard cover)	E-Z Fit long, 2mil 14" long Acid-free precut jacket cover # 80386	Highsmith	Highsmith/Demco		12.40 (25 / pkg)
BOOK COVER JACKETS (sm) (hard cover)	E-Z Fit long, 2mil 10" long Acid-free precut jacket cover # 80384	Highsmith	Highsmith/Demco		6.80 (25 / pkg)
BOOK COVER JACKETS soft cover	Clear Transparent Contact Paper 24 ft. roll	Con-Tact	Wal-mart/Demco		5.74 / roll
ENVELOPE (for music)	Desert Haze-(Kinko's resume stock paper & envelopes)		Kinkos		.20/piece

CARDS

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
WOOD PLAYING CARDS	Set of 24 wood playing cards. 2 of each (leaf, seed, silhouette) for Oak, Maple, Spruce, Walnut. (printed on maple wood)	Cards of Wood	Cards of Wood	Mike / Terra	6.00 (.25 / card)
CARD POUCH	**(see stitching & screen printing)**				

CLAVES

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED/ FABRICATED	CONTACT	PRICE
CLAVES (2 pr.)	1 pr. cherry wood claves (1" diam.) 1 pr. walnut wood claves (1" diam.)	Madison Children's Museum	Madison Children's Museum (Wood purchased at Workbench)	Evan Murdock * Dan Ganch	5.00/set of 4 (wood cost only)
CLAVES POUCH	**(see stitching & screen printing)**				

LEAF PRESS / STENCILS

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE	
LEAF PRESS POUCH	**(see stitching & screen printing)**					
LEAF PRESS & STENCILS						
WOOD FOR PRESS	Baltic Birch 5' x 5' x 1/2"	Workbench Tools Co.	Workbench Tool Co.			22.96
WOOD FOR STENCILS	Baltic Birch 5' x 5' x 1/9"	Workbench Tools Co.	Workbench Tools Co.			11.80
					Delivery charge	25.00
44 PRESS SETS (2/set)	5" x 8" radius corner (1/2"thick) 2 pieces / set	Gravity Works	Gravity Works	Douglas/Pete	$45/hr for cut & program time (2 hours)	90.00
11 STENCIL SETS (4/set)	5" x 8" x 1/9" w/ 1/4" radius corner 1 - bass leaf stencil 1 - maple leaf stencil 1 - oak leaf stencil 1 - willow leaf stencil	Gravity Works	Gravity Works	Douglass / Pete		
PRESS & STENCIL ENGRAVING	**(see engraving)**					
NOTE CARDS	5" x 8" blank index cards 500/pkg #40804	Oxford	Office Depot		6.98	
RUBBER BANDS	size 73 -3" x 3/8" 1/4 lb. box	Sparco	Office Depot		2.89	

PUZZLE

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED/ FABRICATED	CONTACT	PRICE
PUZZLE BOX	Tupperware 9 5/8" x 9 5/8" x 3" box	Tupperware	Diane Warren	Diane Warren	12.50
TREE PUZZLE	8 pc. tree slice puzzle		Madison Children's Museum		approx. 10.00
TREE PUZZLE LABEL	**(see printed materials)**				

TREE WALK ACITVITY / TOOL POUCH

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
APRON / TOOL POUCH	forest green cotton canvas apron 17" x 21" #9321	Toppers	Pantera Embroidery,Inc.	Joe	6.25
BIRD WHISTLE	bird call key chain #78806	The Birding Company	Chickadee Depot		8.95
MAGNIFYING GLASS	wood handle magnifying Glass	Small World Toys	Madison Children's Museum	Bridget Kelley-Wolle	10.00
PAPER BAG	Brn. paper luch bag #007 150 72 0051	Best Yet	Wal-mart		1.38 / pkg 50
TAPE MEASURE	Delux 60" tailoring tape vinyl coated fiberglass	Prym	Wal-mart		1.16
TOOL POUCH(velcro flap)	**(see stitching & screen printing)**				
WRIST BAND	"Cool Coil" (telephone cord) keychain product # 20145CS47 office depot # 468571	MMF Frank Industries	Office Depot		1.99

STAMPS

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
STAMP BOX	Tupperware "Lunch n' Things" box 5 1/2" x 11"	Tupperware			9.99
STAMP BOX LABEL	**(see printed materials)**				
TREE STAMPS (10)	root (left) Tree-R1 root (right) Tree-R2 trunk (lower) Tree-T1 trunk (upper) Tree-T2 branch (left) Tree-B1 branch (right) Tree-B2 leaves (2, folded) Tree-L1 leaves (2, full) Tree-L2 leaves (7) Tree-L3 leaves (14) Tree-L4	Artwork by Sue Manske at MCM stamps made by Creative Mode	Creative Mode	Chris Mode	24.50 (10 x 2.45 ea.)
INSECT STAMPS (4)	bee #3366 butterfly #3356 butterfly 546-12 spider #3378	Meer Image Meer Image Anne Made Meer Image	Meer Image Meer Image Stamping Sensations Meer Image		2.95 2.95 2.00s 2.95
BIRD STAMPS (3)	flying bird #1/2" x 3/4" owl 68-10 "twitter" #IA-C171011A	Anne Made Anne Made Inky Antics	Stamping Sensations Stamping Sensations Inky Antics		2.00 2.50 3.90
ACORN STAMPS (1)	acorn #AA61	Stamps by Judith	Stamps by Judith		2.00
GRASS SPRIG (1)	grass sprig #IA-C170061A	Inky Antics	Inky Antics		3.90

ENGRAVING / PATCHES / STITCHING

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED/ FABRICATED	CONTACT	PRICE
ENGRAVING					
BIRD WHISTLE	"twist" w/ arrow		Vondra Engraving, Inc.	Jeff Bar	$50 min. order (15 set-up charge + $14whistles + $14 tags)
WHISTLE TAG	directions		Vondra Engraving, Inc.	Jeff Bar	
LEAF PRESS / STENCILS	Stencil Names /Leaf Press	created at MCM	Cummings Enterprises, LLC		148.00
POUCHES	100% cotton /canvas, forest green, velcro flaps				
CARDS			Hats O' Fancy	Renee Roeder	70.00 + materials / set of 5 pouches
CLAVES					
CONTENTS LIST					
STENCILS					
TOOL POUCH					
MATERIALS					
PATCHES					
Logo Patch	Forest Products Logo Patch	Pantera Embroidery, Inc.	Pantera Embroidery, Inc.	Joe	4.75 ea. (see box)
Numeral Patch	sew-on number patches (green)	Joy letter Shop	Wisconsin Craft Market		.59 ea.
	.69 / foot Bead Chain, Dorn Med. Size Bead-chain w/ clasp (chrome) / velcro				

Logo Patches, Stencil Boards, Screen Printing, Printing, and Engraving charges all have a base "set-up rate" regaurdless of the number of items that are created; Therefore, the cost per item decreases when the number per order decreases. It is best to talk the vendor to get the most efficient use of funds and materials.

SCREEN PRINTING / PRINTING / LAMINATION

ITEM	DESCRIPTION	BRAND NAME	PLACE PURCHASED	CONTACT	PRICE
SILK SCREENING POUCHES CARDS POUCH CLAVES POUCH STENCIL POUCH TOOL POUCH	*Silk Screened Logo on pouches	Wildwood Productions	Wildwood Productions	Jake / Dorla	150.00/12Backpacks (price /piece decreases with larger quantities)
PRINTING					
PORT-TO-PRINT					
CD INSERT	*9.5 x 4.75 Web 80# Text (118 GSM) Potlatch Bright Whte, printed 4 colors front & back, trim and half fold.		Port to Print	Jim Devine	CD Cover/Insert 88.00 (13 copies)
EVALUATION	*11 x 8.5 Web 80# Text (118 GSM) Potlatch Bright Whte, printed 4 colors front & back, trim and z fold		Port to Print		Evaluations 108.75 (40 copies)
FIELD GUIDE W/ LAMINATION	*4 x 7 Web 80# Cover (216 GMS) Mohawk Navaho Brill. Whte., printed 4 colors front & back trim and lamination(front & back only)		Port to Print		User Guide + Lam. 150.99 (13 copies)
PARENT PAMPHLET	*8.5 x 14 Web 80# Text (118 GSM) Potlatch Bright Whte, printed 4 colors front & back, trim and 3 accordian fold.		Port to Print		Pamphlets 137.50 (6 copies)
USER GUIDE + LAMINATION	*4 x 7 Web 80# Cover (216 GMS) Mohawk Navaho Brill. Whte., printed 4 colors front & back trim and lamination(front & back only)		Port to Print		Field Guide + Lam. 103.34 (13 copies) Pre-press alterations 37.50
KINKOS					
CHECK-IN SHEET	*Kinko's B &W copy		Kinko's		Check-In Sheet .08 (3/pg)
MUSIC SHEET	*8.5 x 11 Kinko's color copy from disc (techtronics printer-"Desert Haze" cardstock paper)		Kinko's		Music Sheet 1.47 (1/pg)
STICKERS					
ART BOX	*8.5 x 11 label paper, Kinko's color copy from disc (techtronics printer)		Kinko's		Sticker Labels Art Box + List (6/pg) 1.74
JOURNAL	*8.5 x 11 label paper, Kinko's color copy from disc (techtronics printer)		Kinko's		FPL label (9/pg) 1.74
STAMP BOX (inside cover)	*8.5 x 11 label paper, Kinko's color copy from disc (techtronics printer)		Kinko's		Stamp, Journal 1.74 & Tree Puzzle (3 ea./pg)
STAMP BOX LABEL	*8.5 x 11 label paper, Kinko's color copy from disc (techtronics printer)		Kinko's		Stamp Instructions 1.74 (2/pg)

SUPPLIERS

Amazon.com
Head Quarters
P O Box 81226
Seatle, WA 98108-1226
amazon.com

Barnes & Noble Booksellers
7433 Mineral Point Road
Madison, WI 53717
ph: 608-827-0809
bn.com

Bedell-Kraus
1350 Commerce Drive
Stow, Ohio 44224
ph: 1-800-253-5556
Fax:
bedell-kraus.thomasregister.com

Cards of Wood
7754 Pine Island Ct.
Belmont, Michigan 49306
ph: 800-284-9896
Fax: 616-887-1667
cardsofwood.com

Chickadee Depot
3236 University Ave
Madison, WI
ph: 608-231-2288
Fax: 608-231-2762

Creative Mode
4250 Hwy AB
Madison, WI 53718
ph: 608-224-0199
Fax: 608-224-0445
creativemode.com

Cummings Enterprises Inc.
3124 Watford Way
Madison, WI
ph: 608-273-4400
Fax:608-273-0063
cummingsslc@prodigy.net

Demco
'02 Library Supplies & Furniture Catalog
P.O. Box 7488
Madison, WI 53703-7488
ph: 1-800-356-1200
Fax: 1-800-245-1329
demco.com
Brian Shea (Account Specialist)
ph: 1-800-695-0267 x220
Fax: 1-888-329-4728
briansh@demco.com

Dorn True-Value
127 N. Broom St.
Madison, WI
ph: 608-256-0530
Fax: 608-256-3355
(must call before Faxing!)

Gaunch, Dan (Carpenter)
103 Oak Ridge St.
Mt. Horeb, WI
ph: 608-437-3699

GPN Educational Media
P.O. Box 80669
Lincoln, NE 68501-0669
ph: 1-800-228-4630
Fax: 1-800-306-2330
gpn@unl.edu

Gravity Works (Douglas VanHorn)
3610 Lexington Ave
Madison, WI
ph: 608-241-7673
Fax: 608-241-7573
gravity@itis.com

Hats O' Fancy (Renee Roeder)
931 E. Main St. (studio #12)
Madison, WI 53703
ph: 608-256-3979
Fax: 608-256-5171

Highsmith Inc.
W5527 Highway 106
P.O. Box 800
Fort Atkinson, WI 53538-0800
ph: 1-800-558-2110
Fax: 1-800-835-2329
highsmith.com

Inky Antics
3110 Payne Ave.
Cleveland, OH 44114
ph: 800-945-3980
Fax: 888-401-2979
inkyantics.com

Kinkos
654 W. Washington Ave
Madison, WI 53703
ph: 608-255-6367
Fax: 608-255-8661 (1.00 / page)
weborder.kinkos.com (web orders only)

Landau, David
29 S. Fair Oaks
Madison, WI
ph: 608-246-2057
dave@happytrails.biz

Madison Children's Museum(MCM)
100 State Street
Madison, WI 53703
ph: 608-256-6445 (main Museum)
ph: 608-256-4571 (Bridget Kelley-Wolle)
ph: 608-661-4588 (Sue Manske)
ph: 608-661-4589 (Evan Murdock)
Fax: 608-256-3226 (main Museum)
Fax: 608-256-0234 (workshop)

Meer Image
PO Box 12
Arcata CA, 95518
ph: 707-822-4338
Fax: 707-822-5985
meerimage.com

Michael Roger Press, Inc
200 Pond Ave.
Middlesex, NJ 08846
ph: 732-752-0800
Fax: 732-752-8154
mrogerpress.com

NASCO
(Arts & Crafts 2002 Catalog)
901 Janesville Ave.
WI 53538-0901
ph: 920-563-2446
Fax: 920-563-8296
info@[illegible]CO.com

Office Depot
4016 E. Washington Ave.
Madison, WI
ph#: 608-245-8892
Fax: 608-245-8895
officedepot.com

Pantera Embroidery Inc.
2505 W. Beltline Hwy
Madison, WI 53713
ph: 608-277-0100
ph: 800-510-0200 x 104
Fax: 608-277-0204
panteraemb.com

Port-To-Print
2851 Index Rd.
Madison, WI
ph#:608-273-4887
Fax:
p2p.com

Ricardo Beverly Hills
15915 Canary Ave.
La Mirada, CA 90638
ph: 800-724-7496
FAX: 714-670-3477
ricardobeverlyhills.com

Stamps by Judith
11 Cty Road 11 NW
Pine Island, MN 55963
ph: 507-356-8828
Fax: 507-356-2265
stampsbyjudith.com

Stamping Sensations
412 17th Ave.
Fulton, IL 61252
ph: 815-589-2086
Fax: 815-589-2086
rsmakers.org

Tupperware Corporation
(also see Warren, Dana)
Attn: Customer Care
PO Box 2353
Orlando, FL 32802
tuperware.com

Vondra Engraving
P.O. Box259448
Madison, WI 53725-9448
1128 Stewart St.
Madison, WI
ph: 608-271-4804
Fax: 608-271-2605
jeffbar@vondra.com

Wal-Mart
4198 Nakoosa Trail
Madison, WI 53704
ph: 608-241-8808
walmart.com

Warren, Dana (Tupperware)
6650 Offshore Dr.
Madison, WI 53705
direct orders:
my.tupperware.com\djwarre
email:
djwarren5703@hotmail.com

Wildwood Productions
100 S. Baldwin St.
Madison, WI 53703
ph: 608-255-5858
ph: 800-772-9453
Fax: 608-255-5105
wildwoodpro.com

Wisconsin Craft Market
2139 Zeier Road
Madison, WI
ph: 608-244-7900
explorewisconsin.com

Work Bench Tool Co
2833 Perry St.
Madison, WI
ph: 608-273-0148
Fax: 608-273-0160
workbenchtool.com

Younker's Department Stor
East Towne Mall
Madison, WI 53703
ph: 608-241-2111
younkers.com

PROJECT DESIGNERS

Main Museum
Madison Children's Museum
100 State Street
Madison, WI 53703
ph: 608-256-6445
Fax: 608-256-3226

Jean Strickland
ph: 608-661-4577
jeannes@kidskiosk.org

Bridget Kelley-Wolle
ph: 608-256-4571
bridgetk@kidskiosk.org

Museum Workshop
551 W. Main St.
Madison, WI 53703
Fax: 608-256-0234

Sue Manske
ph: 608-661-4588
suem@kidskiosk.org

Evan Murdock
ph: 608-661-4589
evanm@kidskiosk.org

Joan Panepinto
ph: 608-255-4356
jpanepinto@milwpc.com